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		Greenwich Mean Time.	Comet—Star. Δα.	Comet—Star. Δδ.	No. of Comps.	Comet's App. R.A.	Log (p×Δ).	Comet's A pp. Dec.	Log (p×Δ).	Red. to App. Place.		Comp. Star.
1889.		h m s	m s	′ ″		h m s		° ′ ″		s	″	
Jan.	20	6 28 45	+1 14·64	+ 2 18·0	8–8	23 53 18·57	9·3751	−6 2 29·0	0·8657	−1·47	−10·8	45
	27	6 46 8	−1 20·01	+ 0 53·1	8–8	23 48 20·42	9·4648	−5 30 31·9	0·8590	−1·53	−10·8	46
Feb.	4	6 55 47	+1 17·13	+10 30·2	2–2	23 44 18·84	9·5170	−4 52 48·4	0·8524	−1·62	−10·8	47
	8	6 35 8	+1 8·43	− 2 41·8	5–6	23 42 48	9·5137	−4 33 57	0·8523	−1·64	−10·8	48
Comet V., 1888 . . . (*Barnard's*, *October* 30, 1888.)												
1888. Nov.	13	17 28 55	−1 27·17	− 9 36·1	7–7	10 2 29·56	8·9372$_n$	−12 58 29·0	0·9008	+1·45	− 2·0	49
Dec.	6	15 53 56	+1 33·13	− 2 18·0	8–8	10 23 22·19	9·0935$_n$	− 7 16 22·2	0·8771	+2·11	− 8·1	50
	7	15 47 7	−1 29·57	+ 6 36·6	8–8	10 23 55·03	9·1109$_n$	− 6 57 19·0	0·8756	+2·12	− 8·4	51
	9	15 42 13	−2 8·49	+ 0 54·5	8–8	10 24 55·82	9·1005$_n$	− 6 18 15·1	0·8729	+2·18	− 9·1	52
	12	15 49 7	+2 13·39	− 7 31·0	8–8	10 26 12·84	8·9970$_n$	− 5 16 25·7	0·8689	+2·29	−10·1	53
	26	11 54 53	−1 7·41	+ 6 31·2	8–8	10 28 7·54	9·5035$_n$	+ 0 20 26·2	0·8406	+2·71	−14·9	54
	30	12 2 45	−1 25·29	− 6 44·8	8–8	10 27 24·81	9·4750$_n$	+ 2 13 28·5	0·8335	+2·83	−16·3	55

February 8.—Comet faint, from moonlight. The wind being very high the clock was heard with difficulty.
November 13.—Comet fairly bright, but overpowered by twilight latterly.
December 6.—Comet rather faint. Sky hazy. December 26.—Comet faint and observation difficult.
December 30.—Comet faint and observation difficult, owing to the proximity of a small star.

1889.		Greenwich Mean Time.	Comet—Star. Δα.	Comet—Star. Δδ.	No. of Comps.	Comet's App. R.A.	Log (p×Δ).	Comet's App. Dec	Log (p×Δ).	Red. to App. Place.		Comp. Star.
		h m s	m s	′ ″		h m s		° ′ ″		s	″	
Jan.	1	12 6 27	−1 21·17	+1 15·4	8–8	10 26 50·88	9·4584$_n$	+ 3 13 3·5	0·8289	−0·20	+1·5	56
	3	11 21 51	+1 37·37	+5 30·4	8–8	10 26 9·22	9·5043$_n$	+ 4 12 53·7	0·8281	−0·13	+0·8	57
	7	12 1 41	+4 41·65	−6 37·5	8–8	10 24 18·32	9·4254$_n$	+ 6 19 9·3	0·8122	−0·01	−0·6	58
	27	10 14 6	+0 53·11	−4 48·4	8–8	10 8 0·67	9·4648$_n$	+17 29 18·3	0·7456	+0·46	−5·0	59
	29	12 10 34	+1 43·47	−6 10·4	9–9	10 5 47·32	9·0776$_n$	+18 38 17·6	0·6921	+0·50	−5·2	60
Feb.	2	9 20 17	−1 43·42	−9 21·7	3–3	10 1 29·44	9·5075$_n$	+20 43 7·0	0·7331	+0·57	−5·5	61
	4	9 52 31	−1 59·55	+4 13·6	8–8	9 59 12·69	9·4441$_n$	+21 46 27·6	0·7008	+0·61	−5·5	62
	20	9 48 15	+1 23·80	−3 45·7	9–9	9 41 27·16	9·2613$_n$	+28 53 2·5	0·5694	+0·80	−4·3	63
Mar.	2	8 21 2	−1 53·02	−0 31·0	9–9	9 32 14·19	9·3996$_n$	+32 5 11·2	0·5478	+0·83	−2·7	64
	3	8 16 43	−3 22·21	−3 57·8	8–8	9 31 26·65	9·3997$_n$	+32 21 14·5	0·5432	+0·83	−2·5	65
	5	11 11 7	−1 41·63	+0 16·4	8–8	9 29 50·14	8·8949	+32 54 11·9	0·4643	+0·82	−2·1	66

January 1.—Comet fainter. January 7.—Comet faint and difficult to observe.

February 2.—Observation interrupted by clouds. February 20.—Observation not quite satisfactory.

March 3.—The comet appears to maintain its lustre in a remarkable manner and is not sensibly fainter than it was at the end of January.

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Assumed Mean Places of Comparison Stars.

Comet III. 1888.

Comp. Star.	R.A. 1888·0. h m s	Decl. 1888·0. ° ′ ″	Authority.
1	12 56 5·87	+38 39 6·0	$\frac{1}{3}$ (2 Arm.$_2$ 1513 + Lal. 24246).
2	13 24 51·52	+35 6 10·2	$\frac{1}{3}$ (2 B.W.$_2$ 456 + Lal. 24993).
3	13 44 58·57	+33 4 39·9	$\frac{1}{2}$ (B.W.$_2$ 932 + Lal. 25499).
4	14 10 29·15	+29 8 55·0	B.W.$_2$ 184.
5	14 12 46·25	+28 13 39·7	Equat. comparison with B.W.$_2$ 151, B.W.$_2$ 182, and B.W.$_2$ 238.
6	14 22 8·13	+27 29 13·1	Equat. comparison with B.B. vi. + 27°·2375 B.W.$_2$ 566.
7	15 14 59·49	+17 39 7·7	Equat. comparison with B.B. vi. + 17°·2848 and B.W.$_2$ 242. (Decl. doubtful.)
8	15 20 25·19	+16 55 35·4	$\frac{1}{2}$ (B.W.$_2$ 400 + Lal. 28135).
9	15 28 44·74	+14 50 19·9	Equat. comparison with B.W.$_1$ 447.
10	15 33 1·44	+14 19 26·1	B.W.$_1$ 598.
11	15 48 22·56	+11 45 56·5	$\frac{1}{2}$ (B.W.$_1$ 896 + Schj. 5628).
12	15 51 11·92	+10 26 52·7	B.W.$_1$ 944.
13	15 53 43·21	+ 9 50 1·7	Equat. comparison with B.B. vi. + 9°·3121 and 3139.
			***Comet* 1889.**
14	6 49 43·11	+10 32 55·9	Equat. comparison with B.W.$_1$ 1400 and B.W.$_1$ 1535. (There is no star in the place of Lal. 13302. Its R.A. appears to be that of B.W.$_1$ 1400, and its declination that of B.W.$_1$ 1423.)
15	6 48 59·20	+10 15 2·9	Equat. comparison with B.B. vi. + 10°·1335 and B.W.$_1$ 1414.
16	6 50 16·16	+10 6 3·6	B.B. vi. + 10°·1335.
17	6 41 8·40	+ 8 38 20·1	B.W.$_1$ 1193.
18	6 38 5·44	+ 8 31 44·1	Equat. comparison with B.W.$_1$ 1152 and B.W.$_1$ 1175.
19	6 38 16·94	+ 8 26 30·6	Equat. comparison with B.W.$_1$ 1175.
20	6 32 46·38	+ 8 4 8·7	Equat. comparison with B.B. vi. + 8°·1414 and 1417, and with B.W.$_1$ 823 and 841. (It has been assumed that the R.A. of B.B. vi. + 8°·1414 and 1417 is in each case one second too small.)
21	6 31 51·67	+ 7 49 26·9	$\frac{1}{2}$ (B.W.$_1$ 908 + Schj. 2291).
22	6 28 42·45	+ 7 39 31·3	14 *Monocerotis* $\frac{1}{2}$ (Gr. 9 yr. 637 + Arm.$_2$ 1502).
23	6 18 43·97	+ 6 54 6·4	B.W.$_1$ 489.
24	6 21 13·80	+ 6 34 31·4	B.W.$_1$ 576.

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Comp. Star.	R.A. 1888·0.			Decl. 1888·0.			Authority.
	h	m	s	°	′	″	
25	6	15	25·25	+ 6	30	40·3	Equat. comparison with B.W.,$_1$ 523.
26	5	33	34·31	+ 3	21	14·5	B.W.,$_1$ 801.
27	4	38	56·90	+ 0	21	37·0	½ (Glasg. 1151 + Paris 5437). Proper motion, amounting to −0$^{\mathrm{s}}$·013 in R.A. and −0″·07 in decl., is assumed provisionally by comparison with Lal. 8934 and B.W.,$_1$ 808.
28	4	17	37·61	− 1	13	44·7	⅓ (Lam. 575 + B.W.,$_1$ 324 + Lal. 8262).
29	3	28	47·73	− 3	36	9·2	⅙ (2 Glasg. 833 + 2 Paris 4227 + B.W.,$_1$ 491 + Lal. 6608).
30	3	18	55·68	− 3	56	0·6	⅓ (2 Glasg. 791 + B.W.,$_1$ 300).
31	3	5	42·36	− 4	14	6·3	⅕ (Glasg. 739 + Arm.$_2$ 405 + Paris 3826 + Arg. Gen. Cat. 3442 + B.W.,$_1$ 50).
32	2	49	43·64	− 5	9	59·5	Berlin Mer. Obs. AN. 2887.
33	1	50	14·22	− 7	0	33·6	Equat. comparison with B.W.,$_1$ 851 and B.W.,$_1$ 925.
34	1	49	12·28	− 7	8	28·9	B.W.,$_1$ 851.
35	1	44	37·90	− 7	15	42·2	⅓ (Arm.$_2$ 239 + Paris 2286 + Arg. Gen. Cat. 1783). Proper motion, amounting to +0$^{\mathrm{s}}$·014 in R.A. and +0″·08 in decl., is assumed provisionally by comparison with Lal. 3379 and B.W.,$_1$ 765.
36	1	29	16·44	− 7	22	49·7	Equat. comparison with B.W.,$_1$ 517 and B.W.,$_1$ 536.
37	1	15	22·97	− 7	32	42·6	B.W.,$_1$ 212.
38	0	46	14·57	− 7	44	3·4	½ (Lam. 51 + Equat. comparison with B.W.,$_1$ 822).
39	0	35	14·57	− 7	43	49·8	½ (B.W.,$_1$ 576 + Lal. 1076–7).
40	0	29	24·43	− 7	34	49·6	⅓ (B.W.,$_1$ 471 + Lam. 35 + Schj. 196).
41	0	23	55·17	− 7	27	12·9	B.W.,$_1$ 367.
42	0	26	6·14	− 7	26	37·1	B.W.,$_1$ 400.
43	0	21	24·22	− 7	13	28·0	B.W.,$_1$ 326.
	1889·0.			1889·0.			
44	0	16	55·46	− 7	15	31·0	Equat. comparison with B.W.,$_1$ 265 and B.W.,$_1$ 326.
45	23	52	5·39	− 6	4	36·3	½ (B.W.,$_1$ 1029 + Lal. 46960).
46	23	49	41·97	− 5	31	14·2	½ (B.W.,$_1$ 978 + Lal. 46879).
47	23	43	3·33	− 5	3	7·8	⅓ (2 Yarn. 10499 + B.W.,$_1$ 848).
48	23	41	41	− 4	31	5	S.D.

Comet V. 1888.

	1888·0.			1888·0.			
49	10	3	55·28	−12	48	51·0	½ (Lal. 19796 + Lam. 653) and ½ (Lal. 19796 + B.W.,$_1$ 9). The decl. of Lam. 653 is 14″·4 less, and the R.A. of B.W.,$_1$ 9 is erroneous, being that of Lal. 19786, a star which precedes 21 seconds.

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Comp. Star.	R.A. 1888·0. h m s	Decl. 1888·0. ° ′ ″	Authority.
50	10 21 46·95	− 7 13 56·1	$\frac{1}{3}$ (B.W.$_1$ 351 + Lam. 888 + Lal. 20283).
51	10 25 22·48	− 7 3 47·1	$\frac{1}{4}$ (Gr. 7 yr. 1280 + Yarn, 4377 + Glasg. 2742 + Arm.$_1$ 2286).
52	10 27 2·13	− 6 19 0·4	$\frac{1}{2}$ (Schj. 3861 + Equat. comparison with B.W.$_1$ 414 and B.W.$_1$ 524).
53	10 23 57·16	− 5 8 44·7	Lam. 899.
54	10 29 12·24	+ 0 14 9·9	Lam. 2989.
55	10 28 47·27	+ 2 20 29·6	$\frac{1}{4}$ (Glasg. 2751 + B.W.$_1$ 473 + Lal. 20472 + Lam. 2988), using Grant's P.M.
	1889·0.	1889·0.	
56	10 28 12·25	+ 3 11 46·6	$\frac{1}{4}$ (B.W.$_1$ 462 + Schj. 3865 + Lam. 273 + Lal. 20456).
57	10 24 31·98	+ 4 7 22·5	$\frac{1}{2}$ (B.W.$_1$ 401 + Lam. 249).
58	10 19 36·69	+ 6 25 47·5	$\frac{1}{3}$ (B.W.$_1$ 301 + Lam. 220 + Lal. 20196).
59	10 7 7·10	+ 17 34 11·7	$\frac{1}{2}$ B.W.$_2$ 108–9 + Equat. comparison with Lal. 19906).
60	10 4 3·35	+ 18 44 33·3	$\frac{1}{2}$ (B.W.$_2$ 15–16 + B.B. vi. + 18°·2326).
61	10 3 12·29	+ 20 52 34·2	$\frac{1}{3}$ (2 Yarn. 4224 + B.W.$_2$ 1316–7).
62	10 1 11·63	+ 21 42 19·5	B.B. vi. + 21°·2153.
63	9 40 2·56	+ 28 56 52·5	Equat. comparison with B.B. vi. + 29°·1948.
64	9 34 6·38	+ 32 5 44·8	Equat. comparison with B.B. vi. + 32°·1913 and 1917.
65	9 34 48·03	+ 32 25 14·8	B.B. vi. + 32°·1915.
66	9 31 30·96	+ 32 53 57·6	B.W.$_2$ 620.

Col. Tomline's Observatory, Orwell Park:
1889, *March* 18.

Errata in Professor Oudemans' Paper, Vol. xlix. No. 2.

Page 54, 4th line from bottom (of text), *for* instrumental arc *read* instrumental axes.

Page 56, 7th line from bottom (of notes), *for* more than one figure *read* one figure more.

Page 59, 3rd line from bottom, *for* directions *read* direction.

Page 61, 7th line from bottom (of text), *for* limit of the moments *read* limit of the proportion between the moments.

Page 61, 2nd line from bottom (of note), *for* Beobactungen *read* Beobachtungen.

Errata in Dr. Gill's Paper, Vol. xlix. No. 3.

Page 107, 13th line from top, *for* E *read* ε.

Page 109, 2nd line from bottom (of note), *for* reckoning *read* revolution.

„ „ „ „ *for* round number 10′ *read* round number 10″.

Page 112, 2nd line from top, *for* rapidly *read* rigidly.